

Bonus Chapter 5

The Accounting Equation — Whom to Blame and How It Works

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We're going to start with a little history. After all, debits and credits didn't just magically appear. And, with the history lesson, at least you'll know whom to hate for inventing debits and credits. (We've always found that directing anger correctly is more productive than being angry in general.)

The History of the Accounting Equation

You can trace double-entry bookkeeping back to Luca Pacioli's book, *Summa de Arithmetica, Geometria, Proportioni et Proportionalita* (*Everything about Arithmetic, Geometry, and Proportion*). Pacioli was a Franciscan friar in Venice, Italy, and wrote the *Summa* in 1494. One part of his book described a method of keeping accounts so that a trader could get, without delay, information about his assets and liabilities. Pacioli's interrelating system of accounts was based on two fundamental principles that are still the foundation of accounting today:

✓ **The accounting equation (also called an *accounting model*)**

Assets = Liabilities + Owner's equity

- *Assets* are things of value, such as cash, receivables, inventory, equipment, deposits, and investments that your company owns. These things of value help you operate your business.
- *Liabilities* are the debts owed by the company, such as accounts payable, loans, taxes, and interest.
- *Owner's equity* (also called equity, capital, and paid-in capital) is the owner's interest in the company.

✓ **Debits = credits**

Understanding the Accounting Equation

To understand how the accounting equation works, we'll start a fictitious cash-based business with \$1,000 of our own money, giving the company one asset of cash. To represent our investment into the business, we record the \$1,000 as equity, as you can see from Line 1 in the following table of fictitious accounting transactions.

<i>Line</i>	<i>Assets</i>	=	<i>Liabilities</i>	+	<i>Owner's Equity</i>
1	\$1,000	=			\$1,000
2	\$3,000	=	\$3,000		
	\$4,000	=	\$3,000	+	\$1,000
3	\$2,000	=			\$2,000
4	(\$1,200)	=			(\$1,200)
	\$4,800	=	\$3,000	+	\$1,800

To run our business, we purchase a delivery truck by borrowing \$3,000 from the bank (it's a cheap truck), which we record as Line 2 in the table. Combining this entry with the original investment, we have \$4,000 of assets (the initial cash and the truck), \$3,000 of liabilities (the bank loan for the truck), and \$1,000 of equity. Note that the accounting equation balances. That is, assets equal liabilities plus owner's equity. The table is looking suspiciously like a Balance Sheet — and now you can understand why it's called a *Balance Sheet*.

Every business has income from sales (or it won't stay in business very long) and expenses. Pacioli realized this, too. We're sure you would agree that what you earn belongs to you. At least, you should get to keep most of it. We handle income and expenses in the accounting equation by expanding the equation to include them in owner's equity:

$$\text{Equity} = \text{Original investment} + \text{Income} - \text{Expenses}$$

In our example, the original investment was \$1,000. Suppose that we made \$2,000 of cash sales and pay for \$1,200 of expenses. What would happen to our accounting model? Line 3 in the table shows how \$2,000 of cash sales increases our assets (cash) and the income portion of owner's equity. Line 4 shows that \$1,200 of cash expenses decreases our assets (cash) and the expense portion of owner's equity.

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Income minus expenses is *net income* — and the business pays taxes on this amount. And, when you close the year, Peachtree posts net income after taxes to the equity section of the Balance Sheet. You can gain numerous insights about your business by studying your Balance Sheet and Income Statement. Wish we had space to show you, but . . . if we could write a book on Peachtree in Wiley's Bible series, we'd have plenty of room. So, contact Wiley and help us lobby for a Peachtree Bible.

Now consider Pacioli's second principle of accounting: Debits = Credits. Pacioli needed some mechanical device to make sure that the accounting equation was always in balance. He developed the following four rules, which we find most helpful when preparing journal entries:

- ✓ *Debits* increase Asset accounts and decrease Liability and Equity accounts.
- ✓ *Credits* do the opposite; they decrease Asset accounts and increase Liability and Equity accounts.

Expense and Income accounts behave like Equity accounts, so

- ✓ *Debits* increase Expense accounts and decrease Income accounts.
- ✓ *Credits* (surprise!) do the opposite; they decrease Expense accounts and increase Income accounts.

Return to our example to see how these work. In Line 1 of the table, we started our business by investing \$1,000. We increased our assets and increased our equities. According to Rules 1 and 2, we debited assets and credited equity.

Line 2 shows how we handled the purchase of our truck. Because both an asset (purchase of truck) and a liability (borrowed money) increased, we debited assets and credited liabilities (again, Rules 1 and 2).

In our last transactions (Lines 3 and 4 of the table) we earned \$2,000 of income and paid \$1,200 of expenses. Note the following:

- ✓ The income increased our cash asset by \$2,000 and also increased our income by the same amount. Therefore, Rules 1 and 4 say we should debit (increase) the cash asset and credit (increase) income.
- ✓ Expense transactions have the opposite effect; therefore, Rules 2 and 3 say we should credit (decrease) the cash asset and debit (increase) expenses.

These debit/credit rules are necessary to make sure we always keep the accounting model in balance.

